

Engineered Veneer (EV) Manufacturing Process

Engineered Veneer (EV) combines non-tropical raw materials with state of the art manufacturing technologies, to produce high quality veneers for the surfaces of hardwood plywood products, which would previously have used potentially higher risk (in relation to EUTR) tropical veneers. EV was initially developed for the decorative veneered plywood market, but the technology has now been successfully applied to the production of commercial veneers for the high volume plywood market. The result is an environmentally friendly product, sourced from close to the production mills, rather than from overseas suppliers to the Chinese market such as Malaysia, Solomon Islands or Papua New Guinea.

LOG SELECTION

EV is generally produced from Chinese Poplar logs, grown locally either by local co-operatives, or in registered plantation areas. The light natural colour and soft grain definition of Poplar makes it well suited to the production of EV.

The process of converting timber into EV starts with the selection of logs, following which they are bought to the mill for processing. The timber is trimmed, sawn to length and debarked. The logs are now ready to be peeled.

PEELING OF THE LOGS

The logs are mounted onto a giant lathe. Within minutes the logs are peeled into rotary veneers. This is achieved by pressing a rotating log towards a large blade, thinly peeling a continuous sheet of veneer off the log. The veneer is dried, stacked and then graded. It is now ready to be dyed.

DYING

EV veneers can be dyed to a consistent colour to suit the market requirement. The raw veneer leaves are stacked into a stainless steel cage. Once completely loaded, the stainless steel cage is immersed into a pressurized, heated vat that is filled with water soluble dye. This system ensures that each leaf is given the correct amount of time to allow the dye to completely penetrate each individual leaf of veneer. Once the desired colour has been achieved, the leaves are unloaded from the vat, dried and given a final inspection before going to the gluing stage.

GLUING

The gluing process is critical for the performance of the finished product. A layer of glue goes between each leaf of veneer, to bond the leave of veneer together. Once the stack has been laid up it is then put into a high pressure press to bond the leaves together, creating a large rectangular block.

SLICING OF THE BLOCK

The block is now ready to be sliced into veneer leaves. Once the block has been produced, it is turned through 90 degrees, to present the end grain, then mounted to the slicing unit. The blade now runs across the end grain of the block, slicing thickness controlled leaves of veneer. The veneer leaves that are produced are approximately 0.4mm thick, and in 2440 x 1220 format. The veneer is now ready to be used as face veneer for Eucalyptus and Poplar core plywood products.